

4,733,916). The Official Action states that *Campbell, et al.* discloses a method of reinforcing paperboard made from paper from rolls 1, 2, and 3, to which reinforcing tapes are applied and the blanks are scored. The Official Action recognizes that *Campbell, et al.* does not directly disclose scoring fold lines with a section of the transverse fold wider than another section, but states that *Seufert* teaches making a reinforced paperboard container with a reinforcing material having a width less than that of paperboard, which reinforcing material is glued to the paperboard and then the blank is scored with fold lines, with the fold line 13 having a wider section 17 with a transition zone in between. The rejection thus concludes that it would have been obvious to one of ordinary skill in the art at the time of the invention to include the teachings of *Seufert* in the invention of *Campbell, et al.* in order to compensate stresses in laminate materials when folded into the final product, thereby maintaining the bond between the laminates. Applicant respectfully requests reconsideration.

As previously discussed in the response filed January 7, 2003, to establish a prima facie case of obviousness, it must be shown that: (1) the prior art relied upon, coupled with knowledge generally available in the art at the time of the invention, must contain a suggestion or incentive that would have motivated the skilled artisan to modify a reference of combine references; (2) the proposed modification must have a reasonable expectation of success determined at the time the invention was made; and (3) a prior art reference or combination of references must teach or suggest all the limitations of the claims. (See MPEP § 2142 and 2143; Amgen, Inc. v. Chugai Pharm Co., 927 F. 2d 1200, 18 USPQ 2d 1016 (Fed. Cir. 1991)). The mere fact that a reference could be combined with another does not render the resultant combination obvious unless there is a suggestion in the prior art of the desirability of making the combination as, “although a prior art device may be capable of being modified to run the way the apparatus is claimed, there must be a

suggestion or motivation in the prior reference to do so.” (See, MPEP § 2143.01; In re Fritch, 972 F. 2d 1260, 23 UPSQ 2d 1780 (Fed. Cir. 1992)). In the present case, it is respectfully submitted that there is no suggestion nor has any motivation to combine the cited references been shown to try to support the combination of the cited references of *Campbell, et al.* and *Seufert*, nor do these references remotely suggest the desirability of making such a combination. In fact, the cited references appear to be directed to very different types of products and methods of making.

In paragraph 5 of the Official Action, it is stated that *Campbell, et al.* recognizes the difficulties of maintaining bonds when reinforcing laminates and their paperboard counterparts are subjected to stresses applied during folding upon erecting the finished receptacles. However, such a general statement of the problem to which *Campbell, et al.* allegedly is directed does not evidence a motivation to combine the teachings of *Seufert* with the system of *Campbell, et al.* Pursuant to MPEP § 2142, the burden of establishing a prima facie case to support a claim of obviousness is on the Examiner, and the prior art references must teach or suggest all the claim limitations, as well as have a reasonable expectation of success, both of which must be found in the prior art and not based on an applicants disclosure. (See *id.*) It is respectfully submitted that such a showing has not been made in the present action, and simply because one of the references apparently recognizes difficulties of maintaining bonds between reinforcing laminates and their paperboard counterparts, this does not provide a sufficient showing or evidence to try to support the combination of such references.

Claims 1, 11 and 33 disclose methods of making reinforced paperboard cartons which methods are not believed to be taught by the cited combination of *Campbell, et al.* and *Seufert*. For example, claim 1 discloses advancing a web of paperboard along a path and progressively

applying at least one ribbon of reinforcing material to the advancing web to form a reinforced region to the carton, the ribbon having a width less than the paperboard web. Thereafter, fold lines are scored in the paperboard web with at least one of the fold lines extending transversely to the reinforcing region and crossing the edge of the ribbon of reinforcing material to form a fold line, with the fold line having a first section within the reinforced region and a second region outside the reinforced region. A transition zone is further formed between the first and second sections of the fold lines. Such a construction/method is not taught or suggested by the cited combination of references, nor would such a combination be suggested or successful in trying to form the claimed invention.

As discussed in the prior response, *Seufert* is specifically directed to a window folding (display) box (Col. 1, ll. 20 – 24; Col. 2, ll. 11 – 16). Thus, as illustrated in the drawings of *Seufert*, the folding box of *Seufert* is designed to receive a stiff, transparent material that is placed over a cut-out opening in a cardboard blank (see Fig. 1) or is attached along a side edge of the cardboard blank, as shown in Fig. 2 for creating a display box through which products can be viewed or displayed via the transparent, stiff plastic panel(s). This transparent foil is not, however, a reinforcing material, nor is it disclosed by *Seufert* as being a reinforcing material. Further, it appears that the purpose of the “thinned down areas 17” of *Seufert* are designed to compensate for stresses arising in the foil material at overlap spots during folding of the box, rather than forming a transition zone between the reinforced region (which doesn’t appear to exist in *Seufert*) and a second section outside of the reinforced region. Thus, given the express purposes and disclosure/teaching of *Seufert*, there does not appear to be any suggestion or motivation to modify such a display or window type box to replace the stiff, transparent plastic

foil material with a reinforcing material such as taught by *Campbell, et al.*, which further appears to be at cross purposes with *Seufert*.

In contrast to the display/window box of *Seufert, Campbell, et al.* discloses a method of reinforcing cartons in which reinforcing tapes are applied, after which the blanks are scored by scoring rolls. The “essential feature” of *Campbell, et al.* is that the “tapes are so placed into a carton or container blank as to reinforce the score lines and the scoring is done while the bond between the tapes and paper is not dry, but is free to slip when scoring is done.” (See Col. 2, ll. 81 – 86). Thus, *Campbell, et al.* is directed to a very specific method of forming a reinforced carton blank that requires that the reinforced material and the paperboard be able to move with respect to each other while the fold lines are formed therein. It therefore does not appear that there is any suggestion or motivation to try to replace the reinforcing tapes of *Campbell, et al.* with a transparent, stiff plastic foil as taught by *Seufert*, given the cross purposes and functions of the window/display box taught by *Seufert* and the foldable box of *Campbell, et al.*

Additionally, it does not appear practical to try to combine the teachings of *Seufert* and *Campbell, et al.* Applicant respectfully points out that the “bend lines 13” that are formed in the thick plastic foil of *Seufert*, together with the “thinned down areas 17” are different from and are apparently formed separately from and prior to the formation of “groove (fold) lines 12.” The purpose of the thinned down sections is not to act as a transition zone to provide strength to the fold lines for reinforcement purposes, but rather to prevent the stiff plastic material from cracking or splitting, and are produced in the plastic foil blank prior to it being glued to a blank. (Col. 2, ll. 57 – 63). It further appears that *Seufert* requires the stiff plastic foil material to be specifically aligned and/or applied to the cardboard blank, either over an opening area formed therein as shown in Fig. 1, or along a side portion thereof as shown in Fig. 2, with the bend lines 13 being

arranged or aligned along the groove lines 12 formed in the cardboard blank so as to be “exactly aligned” when the folding box is erected.

This differs from *Campbell, et al.*, which teaches forming fold lines in the tapes and cardboard blanks and critically requires that the glue between the tapes and cardboard blank be still wet so as to enable the two materials to shift or move before final adherence to thus prevent breaking of the adhesion between the paper and tapes, which would enable separation of the plies and ties, and/or cracking or breaking of the blank along its score lines. Combining *Seufert* with *Campbell, et al.* thus would require that the reinforcing tapes that are applied only along the areas to be scored or folded be replaced with a stiff, transparent plastic foil, which is not a reinforcing material and which has a significantly greater width than the reinforcing tapes of *Campbell, et al.*, and would also require that the fold lines formed within this foil material be preformed prior to attachment to the cardboard blank, which methodology fails to fall within the claimed invention such as taught by claim 1, and which further appears to destroy the function or purpose of *Campbell, et al.*

Still further, attempting to form thinned down areas in the reinforcing strips of *Campbell, et al.* as is required to be formed in the stiff, transparent plastic foil material of *Seufert*, would also appear to weaken the reinforcing tapes along the fold or score lines of *Campbell, et al.*, and accordingly destroy their effectiveness at providing reinforcement and additional strength along the fold lines to the box of *Campbell, et al.*, especially given the narrow width of such tapes as indicated in the drawings. It is additionally unclear how such thinned down areas would be formed in the reinforcing tapes of *Campbell, et al.*, especially given *Campbell, et al.*’s express statement of the criticality of the score lines being formed while the adhesive material between

the reinforcing tapes and the cardboard blank is still wet so as to enable to tapes and blank to shift or move.

Accordingly, it is respectfully submitted that there is not any suggestion or motivation to try to combine the teachings of *Seufert* with *Campbell, et al.* to try to form the claimed invention, nor has such a showing been made. Further, even if such a combination were attempted, it would still not be successful in forming the claimed invention, and thus the invention disclosed by claims 1 – 5, 7, 11, and 33 – 37 is not anticipated or made obvious and therefore is patentable over the cited combination of *Campbell, et al.* in view of *Seufert*. It is accordingly respectfully requested that this rejection be withdrawn.

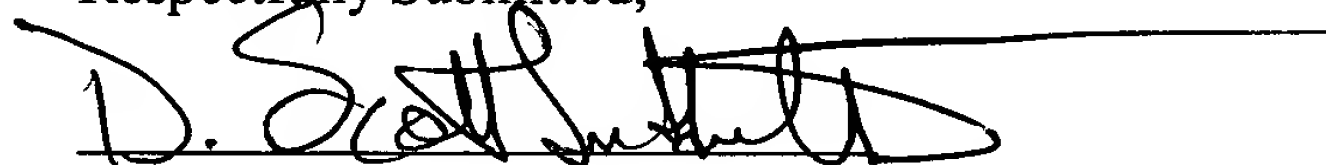
Claim 6 has been rejected under 35 USC § 103(a) as being unpatentable over *Campbell, et al.* in view of *Seufert* (U.S. Pat. No. 4,733,916) as applied to claims 1 – 5, 7, 11 and 33 – 37, and in further view of *Seufert* (U.S. Pat. No. 4,064,206). It is respectfully submitted, as discussed above, that claims 1 – 5, 7, 11, and 33 – 37 are patentable over, and are not made obvious by the cited combination of *Campbell, et al.* in view of *Seufert* (U.S. Pat. No. 4,733,916) as there is no suggestion to try to combine these references, nor does it appear that such a combination likely would be successful at trying to form the claimed invention. Accordingly, it is likewise submitted that claim 6 is not made obvious by and therefore is patentable over the cited combination of references, and it is therefore requested that the rejection of claim 6 be withdrawn.

Claims 8 – 10 and 12 – 15 have been rejected under 35 USC § 103(a) as being unpatentable over *Campbell, et al.* in view of *Seufert* as applied to claims 1 – 5, 7, 11, and 33 – 37 and in further view of *Haddock*. As discussed above, claims 1 – 5, 7, 11, and 33 – 37 are believed to be patentable over the cited combination of *Campbell, et al.* in view of *Seufert*, as

there is no suggestion to combine these references, nor does it appear that such a combination, even if made, would be practical or successful in trying to form the claimed invention. It is further submitted that claims 8 – 10 and 12 – 15 likewise are patentable over the cited combination of references and therefore it is respectfully requested that the rejection of claims 8 – 10 and 12 – 15 under 35 USC § 103(a) should be withdrawn.

In summary, it is respectfully submitted that claims 1 – 15, and 33 – 37, as now pending, disclose methods of making reinforced paperboard cartons that provide a distinct advance in the art that is not anticipated nor made obvious by the cited art of record. It is therefore submitted that claims 1 – 15 and 33 – 37 are patentable over the cited art of record and an early notice of allowance accordingly is solicited. Should the Examiner have any questions or comments regarding the foregoing amendment, he is invited and urged to telephone the undersigned attorney.

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## APPENDIX

1. (Amended) A method of making reinforced paperboard cartons comprising the steps of:
  - (a) advancing a web of paperboard along a path, the web of paperboard having a width;
  - (b) progressively applying at least one ribbon of reinforcing material to the advancing web of paperboard to form a reinforced region for the carton, the ribbon having a width less than the width of the web of paperboard and an edge;
  - (c) scoring fold lines in the web of paperboard, at least one of the fold lines extending transversely to the reinforcing region and crossing the edge of the ribbon of reinforcing material to define a fold line having a first section within the reinforced region and a second section outside the reinforced region, the first section of the fold line being wider than the second section of the fold line; and
  - [(e)] (d) forming a transition zone between the first and second sections of the fold line.
11. A method of scoring a fold line in a paperboard carton blank having a base sheet of paperboard and a reinforced region formed by a reinforcing ribbon laminated to the base sheet wherein the fold line extends transversely to the reinforced region and transitions from outside the reinforced region to inside the reinforced region, the method comprising the steps of:



- (a) providing a multi-point scoring rule having a narrower first section for scoring the portion of the fold line outside the reinforced region and a wider second section for scoring the portion of the fold line within the reinforced region; and
- (b) impressing the paperboard carton blank with the multi-point scoring rule to form the fold line in the paperboard carton blank.

33. (Amended) A method of making reinforced paperboard carton blanks comprising the steps of:

- (a) advancing a web of paperboard along a path, the web of paperboard having a width;
- (b) advancing at least one ribbon of reinforcing material along a path, said reinforcing material having a width less [that] than the width of said web of paperboard;
- (c) progressively deforming the ribbon of reinforcing material; [and]
- (d) progressively laminating the deformed ribbon of reinforcing material to the web of paperboard to form a reinforced paperboard carton blank[.]; and
- (e) forming fold lines across the web of paperboard and reinforcing material.